U.S. Environmental Protection Agency
Office of Waste Programs Enforcement
Contract No. 68-W9-0006

TES 9

Technical Enforcement Support at Hazardous Waste Sites Zone III Regions 5,6, and 7

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PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

COMMERCE INDUSTRIAL CHEMICALS, INC. MILWAUKEE, WISCONSIN WID 980 795 181

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

Work Assignment No.	:	R05032
EPA Region	:	5
Site No.	:	WID 980 795 181
Date Prepared	:	March 16, 1993
Contract No.	:	68-W9-0006
PRC No.	:	309-R05032WI09
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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Commerce Industrial Chemicals, Inc. (CIC), facility in Milwaukee, Milwaukee County, Wisconsin. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs identified.

CIC is a distributor of liquid and solid virgin chemicals. Before September 1991, CIC collected drums containing various wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) from its customers. CIC transported drummed waste from customer facilities to the CIC facility, where it was staged in a Hazardous Waste Drum Storage Area. CIC stored the waste in the Hazardous Waste Drum Storage Area until enough drums of waste had accumulated for a full truckload to be shipped off site to treatment, storage, or disposal facilities (TSDF).

CIC began operations at the facility in October 1948, but hazardous waste collection and storage activities did not begin until 1982. Waste collection and storage operations were recently stopped, and CIC plans to close the Hazardous Waste Drum Storage Area. After closure is completed, the facility will operate as a small-quantity generator of hazardous waste.

To meet customers' needs, CIC operates a quality control (QC) laboratory, where the goods that CIC distributes may be analyzed for various physical or chemical parameters. Waste solvents (D001, F002, F004, and F005) are generated in the QC laboratory and stored in a Laboratory Waste Accumulation Area. At one time, CIC was permitted to incinerate hazardous waste in a Hazardous Waste Incinerator. The incinerator was never operated, and it has been dismantled and removed from the facility.

The facility occupies about 2 acres in an area of mixed use. CIC has used the facility since October 1948 and employs 17 people. The facility is permitted as a storage facility. CIC is also permitted to transport hazardous waste.

During the PA/VSI, PRC did not identify any AOCs at the facility. PRC identified the following three SWMUs at the facility:

1. Hazardous Waste Drum Storage Area
2. Laboratory Waste Accumulation Area
3. Hazardous Waste Incinerator

The potential for a release to occur from these SWMUs is low. No releases to any environmental media have been documented. The Hazardous Waste Drum Storage Area (SWMU 1) will be closed soon. The Laboratory Waste Accumulation Area never contains more than 5 gallons of waste. The Hazardous Waste Incinerator was never operated.

Residences are within 0.25 mile of the CIC facility, but access to the facility is restricted by locked doors when no one is on site. All hazardous waste is stored inside the facility. A ditch about 2,000 feet east of the CIC facility drains into Lincoln Creek, the Milwaukee River, and ultimately into Lake Michigan. Lake Michigan is the City of Milwaukee's primary drinking water source. At least one residence within 0.25 mile north of the facility uses ground water as a source of drinking water. This residence is not downgradient of the facility. Ground water is not a primary source of drinking water in the City of Milwaukee. Two isolated wetlands are more than 1 mile away from the facility. No other sensitive environments have been identified within 2 miles of the CIC facility.

PRC recommends that closure activities for the Hazardous Waste Drum Storage Area be initiated as soon as they are approved by WDNR.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Commerce Industrial Chemicals, Inc. (CIC), facility in Milwaukee, Wisconsin. The PA was completed on January 3, 1992. PRC gathered and reviewed information from Wisconsin Department of Natural Resources (WDNR) and from EPA Region 5 RCRA files. The VSI was conducted on January 8, 1992. It included interviews with a CIC facility representative and a walk-through inspection of the facility. PRC identified three SWMUs and no AOCs at the facility. Other information was gathered during the PA and after the VSI from the City of Milwaukee (Milwaukee), CIC, the Federal Emergency Management Agency (FEMA), the Rand McNally Corporation (Rand McNally), the Southeast Wisconsin Regional Planning Commission (SEWRPC), the U.S. Department of Agriculture

(USDA), the U.S. Department of Commerce (USDC), the U.S. Geological Survey (USGS), and the Wisconsin Geological and Natural History Survey (WGNHS).

The VSI is summarized and four inspection photographs are included in Attachment A. Field notes from the VSI are included in Attachment B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history; environmental setting; and receptors.

2.1 FACILITY LOCATION

The CIC facility is located at 5611 West Woolworth Avenue in Milwaukee, Milwaukee County, Wisconsin (latitude 87°58'57"N, longitude 43°07'57"W). Figure 1 shows the location of the facility in relation to the surrounding topographic features. The facility occupies about 2 acres in a mixed use area.

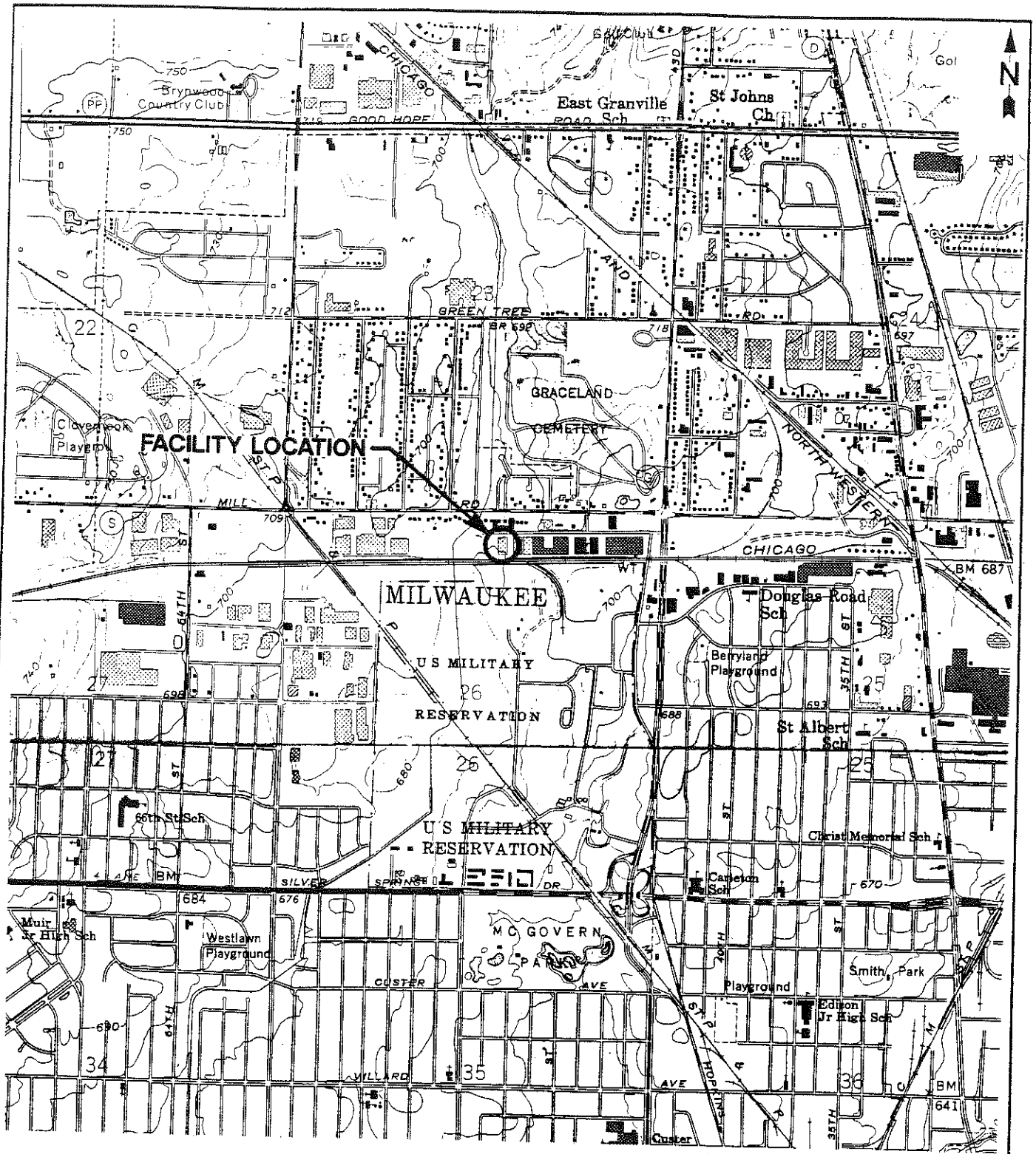
The CIC facility is bordered on the north by a telephone directory distributing facility and warehouse, on the west by an empty field and railroad tracks, and on the south by railroad tracks, Havenwoods Park, and a U.S. Army Reserve base. The facility is bordered on the east by warehouses and distribution centers.

2.2 FACILITY OPERATIONS

CIC is a distributor of liquid and solid virgin chemicals. Chemical goods distributed by CIC include solvents, esters, ketones, alcohols, amines, resins, pigments, and glycols. CIC also distributes containers and container liners. To meet customers' needs, CIC operates a quality control (QC) laboratory, where the goods that CIC distributes may be analyzed for various physical or chemical parameters. CIC does not manufacture or blend chemicals on site.

Prior to September 1991, CIC collected drums containing various wastes from its customers. CIC transported the drummed waste from customer facilities to the CIC facility, where it was staged in a drum storage area. CIC stored the waste in the drum storage area until enough drums of waste had accumulated for a full truckload to be shipped off site to treatment, storage, or disposal facilities (TSDF). CIC filed notification with WDNR on December 20, 1991, that it intends to stop its hazardous waste transport and storage operations as soon as closure activities are completed. After closure is complete, CIC will operate as a small-quantity generator of laboratory wastes.

The facility has operated at its current location since October 1948 (CIC, 1980b). CIC employs seventeen people at the facility, including two truck drivers. The facility consists of a 45,000-square-foot, brick and concrete warehouse and a 2,700-square-foot, brick office building



SCALE 1:24000

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SCALE: 1" = 2,000'

SOURCE: MODIFIED FROM USGS, 1971

COMMERCE2.DWG - 2/19/82 - MLB

COMMERCE INDUSTRIAL CHEMICALS, INC.
MILWAUKEE, WISCONSIN

FIGURE 1

FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

attached to the warehouse. The warehouse includes dry goods storage areas, a drummed material storage area, and the Hazardous Waste Drum Storage Area. The office building houses the QC laboratory and office space.

CIC's truck trailers are parked on the earthen lot on the east side of the facility. Prior to 1985, these trucks were fueled with gasoline from an underground storage tank (UST) beneath the earthen lot. The UST was closed in place in 1985, and no signs of release from the UST were noted by the contractors performing this work (Schaefer Brothers Building Company, 1985). No ground-water monitoring wells were installed as part of the closure activities.

2.3 WASTE GENERATING PROCESSES

CIC's QC laboratory generates spent laboratory solvents (D001, F002, F004, and F005). Spent solvent is accumulated in a 5-gallon pail in the QC laboratory (SWMU 2). In the past, CIC stored spent laboratory solvents in the Hazardous Waste Drum Storage Area before the waste stream was disposed of off site. When the Hazardous Waste Drum Storage Area is closed, CIC will store it on site for less than 90 days before it is disposed of off site. CIC does not generate any other solid wastes.

When the facility's Hazardous Waste Drum Storage Area was operational, it stored a variety of wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) generated off site. During the VSI, only two drums of waste material remained on site, and CIC intends to dispose of these drums off site as soon as the unit is closed.

The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

2.4 HISTORY OF DOCUMENTED RELEASES

No releases from SWMUs at the CIC facility have been documented. PRC did not observe any evidence of a release during the VSI.

2.5 REGULATORY HISTORY

CIC submitted a notification of hazardous waste activity to EPA on August 18, 1980 (CIC, 1980a). The facility submitted a RCRA Part A permit application on November 14, 1980 (CIC, 1980b). This application listed the following processes and wastes:

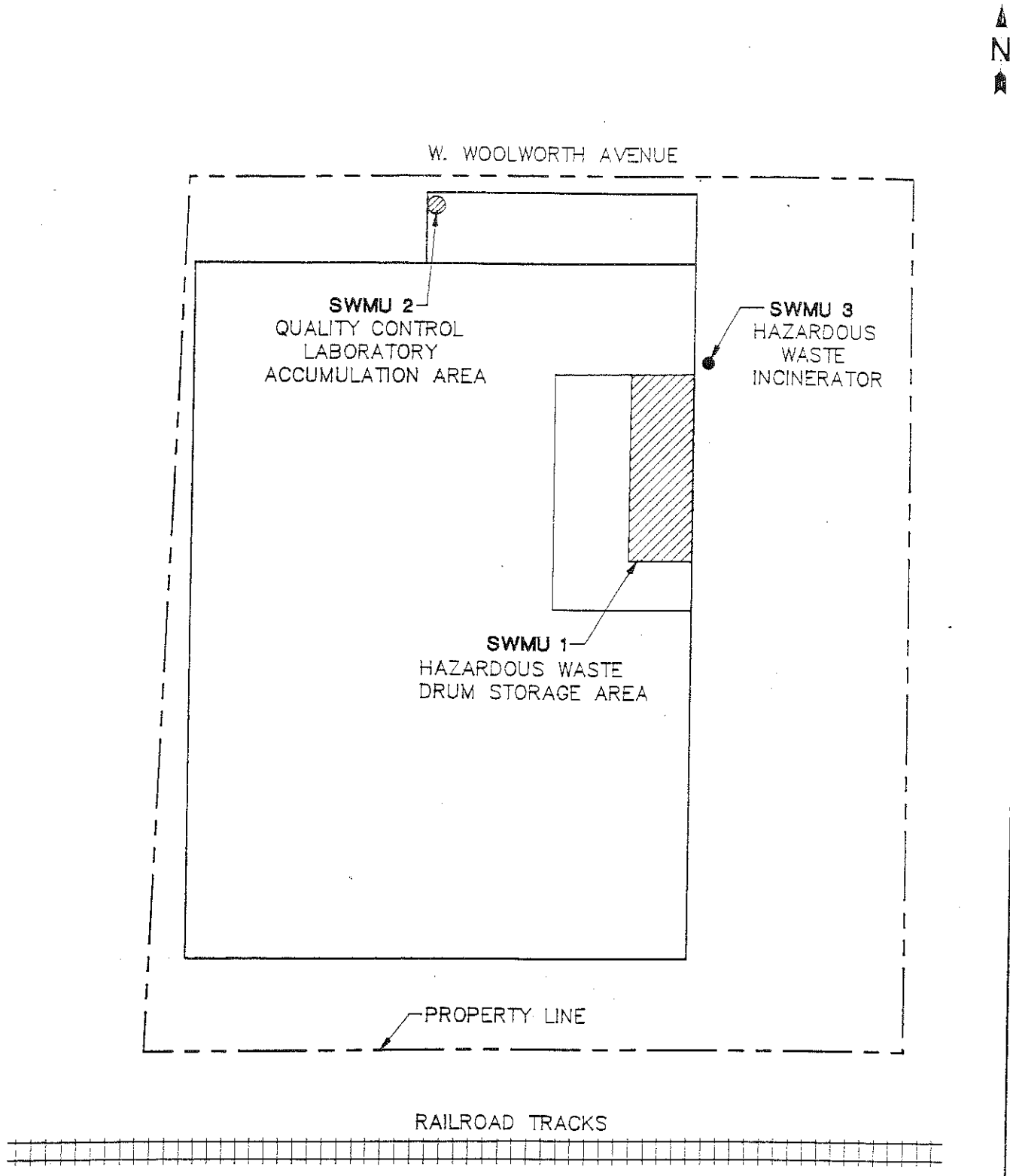
TABLE 1

SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
1	Hazardous Waste Drum Storage Area	Yes	Active; greater than 90-day storage of hazardous waste; facility intends to close unit
2	Laboratory Waste Accumulation Area	No	Active; satellite accumulation area
3	Hazardous Waste Incinerator	Yes	Inactive; never used; dismantled and removed from facility

Note:

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



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SOURCE: MODIFIED FROM WDNR ENVIRONMENTAL ASSESSMENT (WDNR, 1982a)

COMMERCE INDUSTRIAL CHEMICALS, INC.
MILWAUKEE, WISCONSIN

FIGURE 2

FACILITY LAYOUT

PRC ENVIRONMENTAL MANAGEMENT, INC.

TABLE 2
SOLID WASTES

Waste/EPA Waste Code	Source	Solid Waste Management Unit
Drummed Waste/D001, F001, F002, F004, F005, F017, K078, K086, P100	Off Site	SWMU 1
Spent QC Laboratory Solvent/D001, F002, F004, F005	QC Laboratory	SWMU 2

Process	Wastes
Container storage (S01) (40,000 gallons)	D001, F001, F002, F004, F005, and K078
Tank storage (S02) (6,000 gallons)	D001, F001, F002, F004, F005, K078, K086, and P100

EPA granted CIC interim status on June 21, 1982 (EPA, 1982a), and issued a formal request for submittal of CIC's Part B permit application on August 5, 1982 (EPA, 1982b). CIC applied for a Part B permit on February 9, 1983. On August 20, 1987, EPA issued CIC a permit to operate a hazardous waste storage facility (EPA, 1987).

In March 1987, CIC submitted to WDNR a plan of operation for a hazardous waste storage facility. On June 3, 1988, WDNR issued a plan of operation modification to CIC (WDNR, 1988b). On September 30, 1988, WDNR issued CIC a permit to operate a hazardous waste storage facility with a capacity of 396 55-gallon drums and a permit to operate a hazardous waste transport service. Since 1988, WDNR has renewed these permits. CIC submitted its latest renewal application to WDNR on September 23, 1991 (CIC, 1991).

CIC will close its hazardous waste storage facility as soon as closure activities are approved by WDNR. After the facility is closed, CIC will no longer transport hazardous waste.

WDNR has evaluated the CIC facility for compliance with RCRA on at least eight occasions. These evaluations include compliance evaluation inspections and record reviews. Based on records of these evaluations, the CIC facility was out of compliance on at least four occasions. CIC has achieved compliance on each of these occasions. The results of the evaluations are presented in Table 3.

CIC notified EPA and WDNR in November 1982 that it intended to operate a Hazardous Waste Incinerator (CIC, 1982a and 1982b). CIC's RCRA Part B permit application and WDNR Feasibility Report included the addition of the incinerator as a hazardous waste treatment unit. On May 18, 1982, WDNR issued CIC a permit to construct and operate the Hazardous Waste Incinerator (WDNR, 1982b). Although the City of Milwaukee and various citizens' coalitions opposed the proposed incinerator, EPA and WDNR granted the facility a license to treat wastes in the incinerator. CIC constructed, but never operated, the Hazardous Waste Incinerator due to cost concerns. The Hazardous Waste Incinerator has been dismantled and removed from the facility. WDNR has determined that the facility does not require an air permit for its current operations (WDNR, 1990b).

TABLE 3

FACILITY COMPLIANCE EVALUATIONS BY WDNR

Inspection Date	Areas of Noncompliance	Date Compliance Achieved
04/13/81	No waste analysis plan; no inspection schedule; no contingency plan; no operating record	01/27/83
01/27/83	None	NA[a]
08/14/85	None	NA
05/14/86	None	NA
06/02/88	No documentation of personnel training; inadequate manifest receipt procedures; failure to identify contents and mark dates on all containers entering storage; failure to maintain a complete operating record	08/09/88
05/30/90	None	NA
09/11/90	Inadequate contingency plan; inadequate emergency procedures plan; no documentation of personnel training; incorrect manifest receipt procedures; failure to maintain a complete operating record; failure to maintain adequate aisle space in storage area	11/09/90
03/27/91	Inadequate proof of financial responsibility	10/24/91

[a] NA = Not applicable

References: CIC, 1988a, 1988b, and 1990; EPA, 1981, 1988a, and 1988b; WDNR, 1981, 1983, 1985, 1986, 1988a, 1988c, 1990a, 1990c, 1991a, and 1991b.

CIC has applied for a storm water discharge permit for the facility, but WDNR has not yet issued the permit.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the CIC facility.

2.6.1 Climate

Milwaukee County is characterized by a continental climate with cold and snowy winters and warm summers. The average temperature in January is 20.7 degrees Fahrenheit (°F); the average temperature in July is 72.1°F. Prevailing winds in Milwaukee County are northwesterly in late autumn and winter, northeasterly in spring, and southwesterly in summer and early autumn. The average wind speed is between 10 and 14 miles per hour (USDA, 1971).

Total annual precipitation in Milwaukee County averages about 30.07 inches, with about 55 percent of the precipitation falling between May and September. The estimated mean annual lake evaporation in Milwaukee County is about 29 inches. Average seasonal snowfall is 42 inches (USDA, 1971). The maximum, 1-year, 24-hour rainfall in Milwaukee is between 2 and 2.5 inches (USDC, 1961).

2.6.2 Flood Plain and Surface Water

The CIC facility is not in any flood plain (FEMA, 1985). The surface water body nearest to the CIC facility is a ditch that borders the facility's western property line. USGS classifies the ditch as an intermittent water body that does not drain into another water body. Another ditch within 2,000 feet east of the facility forms the headwaters of Lincoln Creek. Lincoln Creek flows into the Milwaukee River about 6.5 stream miles downstream, southeast of the facility. The Milwaukee River discharges to Lake Michigan about 8 stream miles downstream of the confluence of Lincoln Creek and the Milwaukee River (USGS, 1971 and 1976). Lincoln Creek, the Milwaukee River, and Lake Michigan are used for recreational purposes. Lake Michigan also serves as a source of drinking water for the City of Milwaukee.

No wetlands have been identified along these waterways within 2 miles downstream of the facility. Two isolated wetlands are more than 1 mile east-northeast and north-northwest of the CIC facility (SEWRPC, 1989).

2.6.3 Geology and Soils

The CIC facility is in a level, developed area, and according to the USDA soil survey, the area around the facility has been filled with clayey material. The fill may also contain construction debris and loamy material. The land surface is probably compacted and absorbs little precipitation (USDA, 1971; USGS 1976).

Soils beneath the CIC facility overlay unsorted and unstratified, sedimental, end moraine deposits. These sediments were deposited during the Quaternary Period and are about 60 feet thick near the facility. Logs of wells drilled near the facility indicate that the Quaternary deposits include an upper stratum of clay about 40 to 60 feet thick above a lower stratum of sand and gravel ranging in thickness from 0 to 30 feet (USGS, 1973; WGNHS, 1992).

The Quaternary deposits are underlain by the dolomitic Milwaukee Formation deposited during the Devonian Period. The Milwaukee Formation is underlain by dolomites deposited during the Silurian Period. Together, dolomites in the Milwaukee Formation and the underlying Silurian formations are used locally as a source of drinking water and are called the Niagara Aquifer. The uppermost dolomite formation of the Niagara Aquifer is about 70 to 115 feet below ground surface near the CIC facility, and the aquifer is about 450 feet thick beneath the facility (USGS, 1973; WGNHS, 1992).

The Niagara Aquifer is underlain by the Maquoketa Shale Formation, deposited during the Ordovician Period. The Maquoketa Shale Formation acts as an aquitard between the Niagara Aquifer and lower aquifers. It is about 200 feet thick beneath the facility (USGS, 1973; WGNHS, 1992).

The Maquoketa Shale Formation is underlain by dolomites of the Galena-Platteville Formation and sandstones of the Saint Peter Formation and Prairie du Chien Group. These formations were deposited during the Ordovician Period and are underlain by Cambrian Period sandstones. Collectively, the dolomite and sandstone formations below the Maquoketa Shale Formation are called the Sandstone Aquifer. This aquifer may be used locally, but its use near the CIC facility has not been reported. The thickness of the Sandstone Aquifer beneath the facility is at least 775 feet, but the aquifer has not been drilled through (USGS, 1973; WGNHS, 1992).

Precambrian igneous and metamorphic rock underlie the Sandstone Aquifer. The rock formation is not known to be used as a water source within Milwaukee County (USGS, 1973).

2.6.4 Ground Water

While no site-specific information about ground water beneath the facility has been developed, a general study of water resources in Wisconsin's Lake Michigan basin is available (USGS, 1973). The water resources study, logs of wells drilled near the facility, and a list of active wells obtained from the City of Milwaukee's Water Works Department indicate that private wells within 0.25 mile of the facility draw water from the shallow sand and gravel stratum in the Quaternary deposits. Other private wells near the facility draw water from the Niagara Aquifer. Depending on local variations in the thickness of the upper clay stratum in the Quaternary deposits, water in the lower sand and gravel stratum and the Niagara Aquifer may be under artesian pressure. Generally, the depth to water near the facility is 35 feet below ground surface (City of Milwaukee, 1992; WGNHS, 1992).

Water in the sand and gravel Quaternary deposits flows east toward Lake Michigan. Wells drawing water from the sand and gravel deposits near the facility pump water at rates of 1.5 to 15 gallons per minute. Water in the deeper Niagara Aquifer flows generally east, but pumping from wells in Milwaukee County may affect the flow locally. Wells set in the Niagara Aquifer in the Lake Michigan basin have been reported to pump up to 1,200 gallons per minute (USGS, 1976; WGNHS, 1992)

2.7 RECEPTORS

The CIC facility occupies about 2 acres in a mixed use area in Milwaukee, Milwaukee County, Wisconsin. In 1990, Milwaukee had a population of about 628,088 persons (Rand McNally, 1992).

The CIC facility is bordered on the north by a telephone directory distributing facility and warehouse, on the west by an empty field and railroad tracks, and on the south by railroad tracks, Havenwoods Park, and a U.S. Army Reserve base. The facility is bordered on the east by warehouses and distribution centers. The nearest school, Douglas Street School, is slightly more than 1/2 mile east-southeast of the CIC facility. A residential area is within 0.25 mile north of the CIC facility. Facility access is controlled by a monitored entryway during working hours. The facility is locked when no one is there.

A ditch within 2,000 feet east of the facility forms the headwaters of Lincoln Creek. Lincoln Creek flows into the Milwaukee River, which eventually discharges into Lake Michigan about 15 stream miles from the CIC facility (USGS, 1971 and 1976). Lincoln Creek, the Milwaukee River, and Lake Michigan are all used for recreational purposes. Additionally, Lake Michigan is the

primary source of drinking water for the City of Milwaukee and other communities along the lake.

Ground water is used as a drinking water supply by several residences near the CIC facility. It is also used as an industrial supply several miles upgradient of the facility. The nearest active drinking water well is within 0.25 mile north of the facility on 56th Street. Ground water is not a primary source of drinking water in the City of Milwaukee (City of Milwaukee, 1992; WGNHS, 1992).

No on-site sensitive environments exist. Two isolated wetlands are more than 1 mile east-northeast and north-northwest of the CIC facility (SEWRPC, 1989). No other sensitive environments have been identified within 2 miles of the facility.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the three SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented release, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1	**Hazardous Waste Drum Storage Area**
Unit Description:	The Hazardous Waste Drum Storage Area is located in a room on the east side of the facility. Until September 1991, CIC collected drummed waste from its customers, brought the drums on site, and stored the waste in this unit until enough waste had accumulated for a full truckload to be shipped off site. Between 160 and 200, 55-gallon drums were usually stacked two high on pallets during storage, but CIC is permitted to store up to 396 drums in this unit. The unit measures about 22 feet by 65 feet (see Photographs No. 1 and 2).
Date of Startup:	This unit began operation in August 1982.
Date of Closure:	This unit is active. However, CIC will close the unit as soon as closure activities are approved by WDNR.
Wastes Managed:	This unit managed various wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) collected from its customers. During the VSI, two drums of hazardous waste were stored in the unit. The CIC representative indicated that these drums would be disposed of when WDNR approves the impending closure.
Release Controls:	This unit is underlain by a concrete floor. Individual concrete slabs are keyed together, and no floor drains exist within the building. The unit is ventilated by an air duct that extends vertically along the eastern wall of the unit. The building that houses the unit is completely enclosed.
History of Documented Releases:	No releases from this SWMU have been documented.

Observations:	The unit contained two, 55-gallon drums of hazardous waste during the VSI. PRC did not observe any cracks in the concrete floor, and the concrete slabs that make up the floor are keyed together. PRC did not observe any evidence of a release from this unit.
SWMU 2	**Laboratory Waste Accumulation Area**
Unit Description:	The laboratory waste accumulation area is located in the QC laboratory near the north end of the CIC facility. The unit consists of an unmarked area near the northwest corner of the laboratory. Waste solvents are stored in a sealed, 5-gallon pail on the laboratory floor until enough waste has accumulated to be disposed of off site (see Photograph No. 3).
Date of Startup:	This unit began operating when the Hazardous Waste Drum Storage Area (SWMU 1) began operations in August 1982.
Date of Closure:	This unit is active.
Wastes Managed:	This unit manages spent laboratory solvents, including spent halogenated and nonhalogenated solvents (D001, F002, F004, and F005).
Release Controls:	This unit is underlain by a concrete floor. No drains exist within the QC laboratory. Waste is stored in a sealed, 5-gallon pail.
History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The unit contained one, sealed, 5-gallon pail of spent solvent generated in the QC laboratory.
SWMU 3	**Hazardous Waste Incinerator**
Unit Description:	The Hazardous Waste Incinerator was located outdoors along the CIC facility's eastern wall. It was a Kelly Company Model 380B incinerator designed to burn hazardous waste at a rate of 13 to 17

	gallons per hour and a temperature of 1,800°F. Waste would have been transferred from drums into a 110-gallon, on-board tank that was part of the incinerator. The system was to be operated 8 hours per day, 5 days per week, and 52 weeks per year. CIC was permitted to operate the Hazardous Waste Incinerator. However, due to cost concerns, CIC never operated it.
Date of Startup:	This unit was installed in 1982 or 1983. It was never operated.
Date of Closure:	Because the unit was never operated, closure was not required. It has been dismantled and removed from the facility.
Wastes Managed:	This unit was designed to incinerate various solvent wastes (D001, F003, F005, and K086).
Release Controls:	The unit was located on a concrete pad outside the facility. It had no emission control equipment because combustion of wastes was expected to be complete.
History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The Hazardous Waste Incinerator was not on site during the VSI. The concrete pad on which the unit was installed was unstained, and PRC did not observe any evidence of a release from this unit.

4.0 AREAS OF CONCERN

PRC identified no AOCs at the CIC facility during the PA/VSI.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified three SWMUs and no AOCs at the CIC facility. Background information on the facility's location; operations; waste generation and management; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. Following are PRC's conclusions and recommendations for each SWMU. Table 4, located at the end of this section, summarizes the SWMUs at the CIC facility and recommended further actions.

SWMU 1 **Hazardous Waste Drum Storage Area**

Conclusions: The Hazardous Waste Drum Storage Area is on the east side of the CIC facility. The room in which this unit is located is constructed of concrete floors with no cracks. Up to 396 sealed, 55-gallon, waste-containing drums transported from CIC's customers were segregated by waste type and stacked two-high on pallets in this unit. CIC is currently planning to close this unit and cease hazardous waste storage operations as soon as WDNR approves the unit's closure. During the VSI, two drums were stored in this unit. The potential for release from this unit to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends that closure activities be continued as soon as they are approved by WDNR.

SWMU 2 **Laboratory Waste Accumulation Area**

Conclusions: This unit is in the northwest corner of the QC laboratory, in the north part of the facility. One sealed, 5-gallon pail of spent laboratory solvent is stored in this unit. The potential for release from this unit to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action.

SWMU 3 **Hazardous Waste Incinerator**

Conclusions: The Hazardous Waste Incinerator was designed to burn hazardous waste at a rate of 13 to 17 gallons per hour and a temperature of 1,800°F. Waste would have been fed into the incinerator from a 110-gallon, on-board tank that was part of the incinerator. The incinerator was permitted by WDNR, but was never operated. It has been dismantled and removed from the facility.

Recommendations: PRC recommends no further action.

TABLE 4
SWMU SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Hazardous Waste Drum Storage Area	1982 to Present	None	Continue closure activities in accordance with an approved closure plan
2. Laboratory Waste Accumulation Area	1982 to Present	None	No further action
3. Hazardous Waste Incinerator	Not Applicable[a]	None	No further action

Note:

[a] The Hazardous Waste Incinerator was never operated, and it has been dismantled and removed from the facility.

REFERENCES

City of Milwaukee, 1992. List of Active Wells in Milwaukee, Department of Water Works, Open File, January 24.

Commerce Industrial Chemicals Inc. (CIC), 1980a. Notification of Hazardous Waste Activity, U.S. Environmental Protection Agency (EPA) Form 8700-12, August 18.

CIC, 1980b. RCRA Part A Permit Application, EPA Forms 3510-1 and 3510-3, November 14.

CIC, 1982a. Letter from Harriet Pedersen to Jim Schmidt, WDNR, November 18.

CIC, 1982b. Letter from Harriet Pedersen to Rick Karl, November 23.

CIC, 1988a. Letter from Harriet Pedersen to Pamela Mylotta, WDNR, July 26.

CIC, 1988b. Letter from Harriet Pedersen to Sue Rodenbeck, EPA, July 28.

CIC, 1990. Letter from Fredric Michalski to Dolores Hayden, WDNR, November 9.

CIC, 1991. Hazardous Waste Facility Operating License Renewal, WDNR Form 4430-6, September 23.

Federal Emergency Management Agency (FEMA), 1985. Flood Insurance Rate Map, Community Panel No. 550278 0018C, Milwaukee, Wisconsin, November 15.

Rand McNally Corporation (Rand McNally), 1992. United States Road Atlas, 68th Edition.

Schaefer Brothers Building Company, 1985. Statement, Abandoned Gasoline Tank Closure for CIC, March 27.

Southeast Wisconsin Regional Planning Commission (SEWRPC), 1989. Wisconsin Wetlands Inventory Map for Township 8 North, Range 21 East, Milwaukee County, Wisconsin, Base Map Created July 5, 1979, Revised February 27.

U.S. Department of Agriculture (USDA), 1971. Soil Survey of Milwaukee and Waukesha Counties, Wisconsin, U.S. Government Printing Office, Washington, DC, July.

U.S. Department of Commerce (USDC), 1961. Rainfall Frequency of the United States, Technical Paper No. 40, U.S. Government Printing Office, Washington, DC.

U.S. Geological Survey (USGS), 1971. 7.5-Minute Topographic Map, Milwaukee, Wisconsin Quadrangle, 1958, Photorevised 1971.

USGS, 1973. Water Resources of Wisconsin - Lake Michigan Basin, Hydrologic Investigations Atlas HA-432.

USGS, 1976. 7.5-Minute Topographic Map, Thiensville, Wisconsin Quadrangle, 1958, Photorevised 1971 and 1976.

U.S. Environmental Protection Agency (EPA), 1981. Letter from Sandra Gardebring to Donald Michalski, CIC, July 30.

U.S. EPA, 1982a. Letter from Karl Klepitsch to Donald Michalski, CIC, June 21.

U.S. EPA, 1982b. Letter from Karl Klepitsch to Donald Michalski, CIC, August 5.

U.S. EPA, 1987. RCRA Part B Permit for CIC, August 20.

U.S. EPA, 1988a. Letter from Glenn Sternard to Donald Michalski, CIC, July 15.

U.S. EPA, 1988b. Letter from James Brossman to Donald Michalski, CIC, November 2.

Wisconsin Department of Natural Resources (WDNR), 1981. Letter from Victor Pappas to Donald Michalski, CIC, April 16.

WDNR, 1982a. Environmental Assessment for CIC, Docket Number 1828, March.

WDNR, 1982b. Letter from Donald Theiler to Donald Michalski, CIC, May 18.

WDNR, 1983. General Facility Standards Inspection Form for CIC, January 27.

WDNR, 1985. General Facility Standards Inspection Form for CIC, August 14.

WDNR, 1986. General Facility Standards Inspection Form for CIC, May 14.

WDNR, 1988a. General Facility Standards Inspection Form for CIC, June 2.

WDNR, 1988b. Letter from Barbara Zellmer to Donald Michalski, CIC, June 3.

WDNR, 1988c. Letter from Pamela Mylotta to Donald Michalski, CIC, August 9.

WDNR, 1990a. Hazardous Waste Compliance Monitoring Enforcement (CME) Form for CIC, May 30.

WDNR, 1990b. Letter from Jeff Burger to Fredric Michalski, CIC, August 2.

WDNR, 1990c. General Facility Standards Inspection Form for CIC, September 11.

WDNR, 1991a. Hazardous Waste CME Form for CIC, April 2.

WDNR, 1991b. Letter from Colleen Hellenbrand to Harriet Pedersen, CIC, October 24.

Wisconsin Geological and Natural History Survey (WGNHS), 1992. Borelogs for Wells within 0.25 Mile of CIC Facility, Open File, Reviewed February 20.

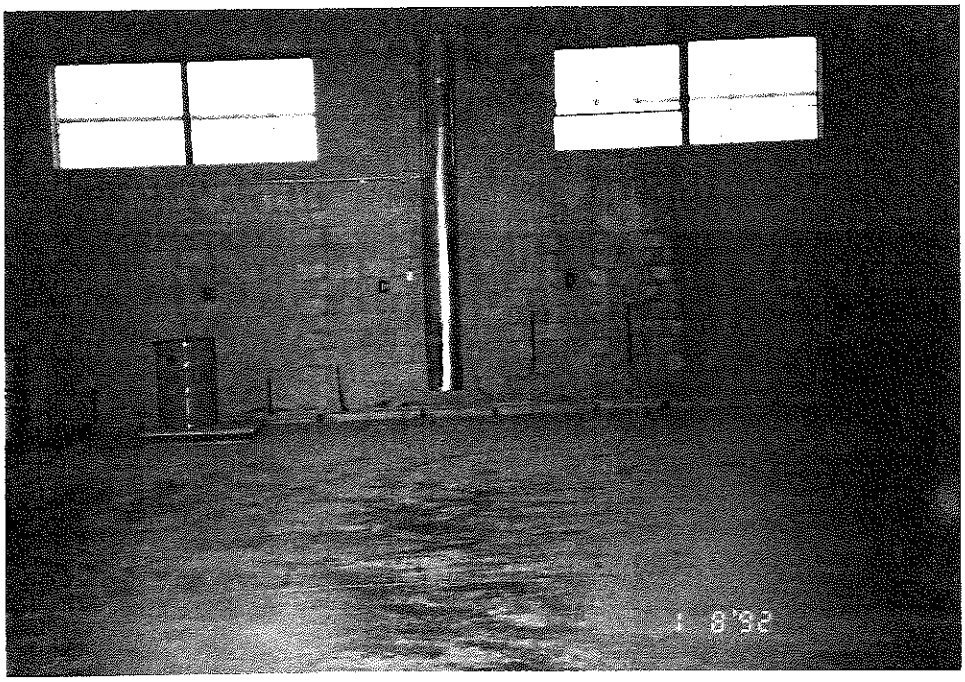
ATTACHMENT A
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

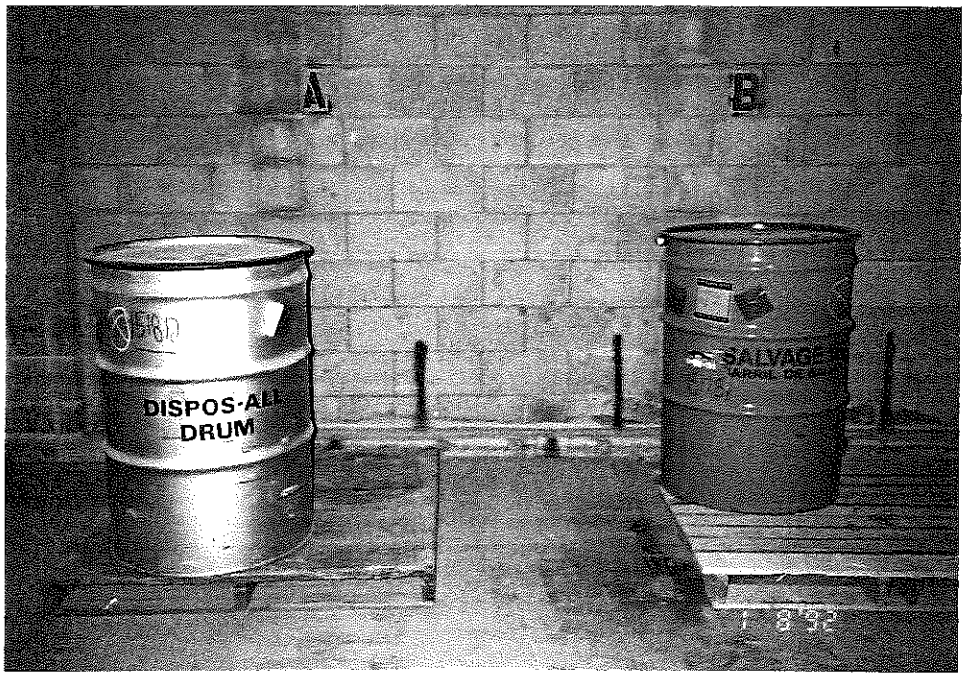
Commerce Industrial Chemicals Inc.
5611 Woolworth Avenue
Milwaukee, Wisconsin 53218

WID 980 795 181

Date:	January 8, 1992
Facility Representatives:	Fredric Michalski, Commerce Industrial Chemicals, Inc. (CIC)
Inspection Team:	Ken Valder, PRC Environmental Management, Inc. (PRC) Joe Dauchy, PRC
Photographer:	Ken Valder, PRC
Weather Conditions:	Overcast and raining, light easterly winds, temperature about 35°F
Summary of Activities:	PRC arrived on site at 9:05 a.m. to conduct the visual site inspection (VSI). The VSI team asked Mr. Michalski to clarify several issues. When this was completed, the VSI team accompanied Mr. Michalski on a facility tour. Mr. Michalski led the VSI team into the warehouse, the Hazardous Waste Drum Storage Area, the incinerator pad, and the quality control (QC) laboratory. The tour was concluded and PRC left the facility at 10:00 a.m. CST.



Photograph No. 1 Location: SWMU 1
Orientation: East Date: 01/08/92
Description: This picture shows Bays A through E in the Hazardous Waste Drum Storage Area. Bay F is not shown in this picture.



Photograph No. 2 Location: SWMU 1
Orientation: East Date: 01/08/92
Description: This picture shows two drums of hazardous waste that remain in the Hazardous Waste Drum Storage Area at the facility.

Photograph No. 3 Location: SWMU 2
Orientation: South Date: 01/08/92
Description: This picture shows the Laboratory Waste Accumulation Area in the QC laboratory. The bucket with the blue lid is accumulating waste.

Photograph No. 4 Location: East end of facility
Orientation: South Date: 01/08/92
Description: This picture shows the area of the facility in which a gasoline underground storage tank (UST) was closed in place. No releases from the UST were documented when the tank was filled with inert material in 1985.

ATTACHMENT B
VISUAL SITE INSPECTION FIELD NOTES

Jan 8, 1992

Commerce Industrial Chemicals

Milwaukee, Wisconsin

T - 35°F, East winds, overcast, raining

0905 Met w/ Fred Michaelski.

Facility is closing - Originally opened to satisfy need for someone to do "milk runs". They stored drums from gen. ent'l a truckload head accumulated. They have since shifted most of their drums to Safety-Kleen. When they close the waste area, the area will be used to store the product for distribution

Incinerator → decided that they couldn't make a profit, so that's why it never operated. The incinerator was on site, but it was never operated.

They have submitted a letter of their intent to close the storage facility on Dec 30, '91. DNR has not responded to the letter yet. They will close as soon as they can.

Wastes were brought from facilities in drums. The tank was to have fed the incinerator. The 6,000-gallon UST was apparently never used. It may have been filled in place

or removed. We requested documentation of the tank closure. Apparently, it was a smaller tank (~1000 gallons) that is no longer active. The tank was closed in-place and filled.

As a transporter, they will stop doing waste completely when closure occurs.

45,000 □ warehouse on about 2 acres. Seventeen employees w/ 2 truckers.

N - Directory Distributing
E - Empty, was a Simplicity Warehouse
S - Railroad and Havensworks

W - Empty field.

Fred doesn't know off the top of his head who the past owners. They have no permits to discharge, and sewage is not regulated. MMSD hasn't required anything. There are no drains in the facility. Stormwater per K.V. information was for roof and parking lot, truck bays (storm sewers in bays).

0935 Begin tour. Warehouse stocks paint pails and container covers

A bay (segregated) at the east end of the facility. Waste taken in, characterized and then placed in rows (A-F). The lab analysis was performed by Safety-Kleen.

The on-site lab is a QC lab only for the paint companies that CK services

Waste drums were stored on pallets

Have 1 drum of F001 (TCE) and 1 drum of D003 in storage

Floor is concrete slab - good condition w/ legs. The drums were stacked 2-high

PIC 1 E View of all rows
PIC 2 E View of rows A & B

On average, a maximum of 160-200 drums were stored.

CIC's generators had to have it drummed before CIC would pick it up

Room is ventilated (ceiling ducts)

0945 Area of UST - grand pad N of tracks parked

PIC 3 S

0950 Incinerator pad near NE end of facility.

0955 QC lab. GC inst. All lab waste will be generator. One 5-gallon blue pail stores waste solvent in lab.

PIC 4 N. Near lab hood

1000 Closeout. Leave.

Tri-State Supply warehouse has been bought by CIC in

W side of current facility.

Houses just N of Distributors across Mill Road.